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Phospho-MAP2K2-pS222 Blocking Peptide

Synthetic peptide
Catalog # BP3391a

Specification

Phospho-MAP2K2-pS222 Blocking Peptide - Product Information

Primary Accession	P36507
Other Accession	P36506, Q63932, Q90891, Q05116, Q01986, P29678, P31938, Q02750, Q63980, Q24324

Phospho-MAP2K2-pS222 Blocking Peptide - Additional Information

Gene ID 5605

Other Names
Dual specificity mitogen-activated protein kinase kinase 2, MAP kinase kinase 2, MAPKK 2, ERK activator kinase 2, MAPK/ERK kinase 2, MEK 2, MAP2K2, MEK2, MKK2, PRKMK2

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

Phospho-MAP2K2-pS222 Blocking Peptide - Protein Information

Name MAP2K2

Synonyms MEK2, MKK2, PRKMK2

Function
Catalyzes the concomitant phosphorylation of a threonine and a tyrosine residue in a Thr-Glu-Tyr sequence located in MAP kinases. Activates the ERK1 and ERK2 MAP kinases (By similarity). Activates BRAF in a KSR1 or KSR2-dependent manner; by binding to KSR1 or KSR2 releases the inhibitory intramolecular interaction between KSR1 or KSR2 protein kinase and N-terminal domains which promotes KSR1 or KSR2-BRAF dimerization and BRAF activation (PubMed:29433126).

Cellular Location
Cytoplasm. Membrane; Peripheral membrane protein. Note=Membrane localization is probably regulated by its interaction with KSR1.

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Phospho-MAP2K2-pS222 Blocking Peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Blocking Peptides

Phospho-MAP2K2-pS222 Blocking Peptide - Images

Phospho-MAP2K2-pS222 Blocking Peptide - Background

MAP2K2 is a dual specificity protein kinase that belongs to the MAP kinase kinase family. This kinase is known to play a critical role in mitogen growth factor signal transduction. It phosphorylates and thus activates MAPK1/ERK2 and MAPK2/ERK3. The activation of this kinase itself is dependent on the Ser/Thr phosphorylation by MAP kinase kinase kinases. The inhibition or degradation of this kinase is found to be involved in the pathogenesis of Yersinia and anthrax.

Phospho-MAP2K2-pS222 Blocking Peptide - References

Burroughs, K.D., et al., Mol. Cancer Res. 1(4):312-322 (2003). Tran, H., et al., Mol. Cell. Biol. 23(20):7177-7188 (2003). Li, S.P., et al., Cancer Res. 63(13):3473-3477 (2003). Li, Y., et al., J. Biol. Chem. 278(16):13663-13671 (2003). Liu, X., et al., J. Biol. Chem. 277(42):39312-39319 (2002).